In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (previously presented) A fuselage comprising:

a frontal fuselage portion that leads through a fluid;

an outer fuselage surface relating with said frontal fuselage portion that receives fluid flow thereon;

at least one fluid flow regulator featured and operable with said outer fuselage surface and extending at least a partial distance around said fuselage, said fluid flow regulator comprising:

a leading surface;

a trailing surface;

an orthoganol pressure recovery drop extending a pre-determined distance between said leading and trailing edges to form a down step, said pressure recovery drop comprising at least one drop face of a calculated distance, said fluid flow regulator functioning to regulate existing pressure gradients along said fuselage to optimize and equalize said fluid flow and to reduce the separation potential of said fluid, wherein the height of a drop face varies along the length of a given drop face, and wherein the drop face further comprises a limited length that further comprises a blended end that gradually blends into surface;

a sub-atmospheric barrier generated at the base of said drop face as said fluid encounters and flows over said pressure recovery drop, said sub-atmospheric barrier comprising a low pressure area of fluid molecules having decreased kinetic energy that serve as a cushion between said higher kinetic energy fluid molecules in said fluid and the molecules at said outer fuselage surface to facilitate laminar flow and assist in the reduction of the separation potential of said fluid; and

a trailing edge that defines and extends from the base of said pressure recovery drop that provides a trailing flow boundary for said fluid.

2. (original) The fuselage of claim 1, wherein said pressure recovery drop is positioned at or proximate an optimal pressure recovery point defined as the location(s) about said surface at which there is an imbalanced or unequal pressure gradient forward and aft of said fluid, thus creating an adverse pressure about said fuselage, which adverse pressure gradient induces friction and pressure drag that ultimately increases the separation potential of said fluid.

3. (original) The fuselage of claim 1, wherein said pressure recovery drop is oriented in a position selected from the group consisting of perpendicular to the direction of flow of said fluid, substantially perpendicular to the direction of flow of said fluid, on an angle with respect to said direction of flow of said fluid, parallel or substantially parallel to the direction of flow of said fluid, and any combination of these.

4. (original) The fuselage of claim 1, wherein said pressure recovery drop comprises a formation selected from the group consisting of linear, curved, spline, and any combination of these.

5. (original) The fuselage of claim 1, wherein said fluid flow regulator extends annularly around said fuselage.

6. (original) The fuselage of claim 1, wherein said pressure recovery drop extends entirely across said outer fuselage surface.

7. (original) The fuselage of claim 1, wherein said pressure recovery drop extends about only a portion of said outer fuselage surface.

8. (original) The fuselage of claim 1, wherein said outer fuselage surface features a plurality of fluid flow regulators that function together to regulate, influence, and control fluid flow and its properties and characteristics across said outer fuselage surface.

9. (previously presented) The fuselage of claim 1, wherein said fluid flow regulator is a dynamic fluid flow regulator capable of adjusting, on demand, with varying design constraints, flow characteristics, environmental conditions, and operational situations pertaining to said fluid, said object, and any combination of these during.

10. (original) The fuselage of claim 9, wherein said dynamic fluid flow regulator comprises at least one selectively adjustable component, wherein said adjustable components are selected from a movable leading edge, a movable pressure recovery drop, and a movable trailing edge, each capable of adjusting the height of said drop face and said pressure drop.

11. (cancelled)

12. (original) The fuselage of claim 1, wherein said fluid flow regulator comprises at least one component that oscillates with varying situations and conditions to vary the height of said pressure recovery drop.

13. (original) The fuselage of claim 1, wherein said fluid flow regulator is integrally formed with said outer fuselage surface.

14. (cancelled)

15. (original) The fuselage of claim 1, wherein said pressure recovery drop comprises a plurality of drop faces to magnify the influence of fluid flow regulator on said fluid.

16. (original) The fuselage of claim 1, wherein said fuselage comprises a fuselage of a moving body or craft selected from the group consisting of a rocket, an aircraft, a submarine, a missile, a torpedo, and any other similar bodies.

17. (original) The fuselage of claim 1, wherein said pressure recovery drop comprises an orthogonal design.

18. (previously presented) A moving body comprising:

at least one surface subject to external flow of fluid;

at least one fluid flow regulator featured and operable with said surface, said fluid flow regulator comprising:

a leading surface;

a trailing surface;

an orthoganol pressure recovery drop extending a pre-determined distance between said leading and trailing surfaces to form a down step, said pressure recovery drop comprising at least one drop face of a calculated height, said fluid flow regulator functioning to regulate existing pressure gradients along said surface subject to external flow of fluid to optimize and equalize said fluid flow and to reduce the separation potential of said fluid, wherein the height of a drop face varies along the length of a given drop face, and wherein the drop face further comprises a limited length that further comprises a blended end that gradually blends into surface, wherein said regulation of said pressure gradients positively influences the flow properties and behavior of said fluid across said surface, and the performance of said moving body;

a sub-atmospheric barrier that is generated as said fluid encounters and flows over said pressure recovery drop, said sub-atmospheric barrier comprising a low pressure area of fluid molecules having decreased kinetic energy that serve as a cushion between said higher kinetic energy fluid molecules in said fluid and the molecules at said surface to facilitate laminar flow and assist in the reduction of the separation potential of said fluid; and

a trailing edge that defines and extends from the base of said pressure recovery drop that provides a trailing flow boundary for said fluid.

19. (original) The moving body of claim 18, wherein said moving body comprises the fuselage of an airplane or other similar aircraft.

20. (original) The moving body of claim 18, wherein said moving body comprises the fuselage of rocket.

21. (original) The moving body of claim 18, wherein said moving body comprises the body or hull of a submarine.

22. (original) The moving body of claim 18, wherein said moving body comprises the body of an automobile.

23. (original) The moving body of claim 18, wherein said moving body comprises the hull of a boat, ship, or other similar watercraft.

24. (original) The moving body of claim 18, wherein said moving body comprises the fuselage of a missile.

25- 37. (cancelled)